The Naval Postgraduate School in Monterey, California recently hosted two important conferences in the area of computer security and information assurance. Sponsored by the National Science Foundation, included attendees and speakers ranged from community college level computer teachers to the state of the art experts from governments and international institutions. For the first time, and perhaps the only time, the WISE/WECS conferences were combined to reach both groups and place side by side the novice and those responsible for their nation's security.

The conferences were organized by the school's Center for Information Systems Security Studies and Research (CISR) headed by Dr. Cynthia Irvine. According to Irvine, CISR is "a group of faculty, staff and students who work to put together both research and educational programs in the area of information assurance. In other words, information operations primarily directed toward network defense."

CISR makes an important impact on the area of computer security both nationally and internationally. Irvine adds, "We've always had an impact within the military, but now we're having a ripple effect out to the civilian sector. In fact, we just graduated 11 of our civilian Scholarship for Service students – our first group – last week. They will all have jobs within the government. So we'll be having an even wider impact than we did before. The WECS workshop, I think, is a great way to enhance that impact and help build national capacity and awareness in information assurance."

One obvious way of reaching a broader range of people is through education. To this end, the Workshop in Education for Computer Security (WECS) was offered to "take people who are educators in community colleges and 4-year universities who are trying to start up information assurance in their computer science departments and teach them how to then teach their students. We want to make sure correct information is getting out, and that they can network and get the right resources," explained Naomi Falby, Conference Coordinator.

"It is intended to be a capacity building effort," added Irvine. This fifth WECS workshop took place from June 23-25, 2003 at the Naval Postgraduate School and was attended by 20 faculty members from 18 different two and four year institutions from California, Arizona, Nevada, Washington, and Oregon. Most received support to attend the workshop. Attendees took classes, worked on computer lab exercises, and were involved in discussion groups to help them formulate their information assurance curriculum. Lunches and social events were organized to establish a sense of community among the participants.

Used to working with the leading edge in the field of information assurance, Irvine said, "It's been fun to work with people from a large variety of colleges and teach them something new, and they're all very enthusiastic. We've presented them with our labs, teaching techniques…various kinds of textbooks they might be using in their classes."

Whereas CISR has had a large program in information assurance for over seven years, one WECS attendee, Everett Bull of Pomona College, said that at the college and university level, these issues are just beginning to be discussed. "On campus, I'm one of those people that's yelling about security, and it's really interesting to see from here how threatening it is, the horror stories, because, probably like most colleges, our IT department isn't particularly sophisticated. We have people that can get things done, but they're pretty much poking around in the dark." Thus, this workshop was exactly what he and faculty at other academic institutions needed.

Other reactions to WECS by its participants were enthusiastic. According to David Becker from Linn-Benton Community College, "Our intent (in attending the workshop) is to learn about security issues and how to incorporate them into our curriculum, and I think that's been really useful."

Randy Larson of Estrella Mountain Community College concurred saying, "It's raising more questions which makes it more beneficial. I'm very passionate about information assurance, and I'm looking forward to adding that into several types of lower-level education as well because we also partner with various high schools within our community college system. I particularly believe that IA should start as soon as they start using the computer." According to Falby, during the next year participants are required to report back on how they have incorporated workshop materials, examples, and teaching styles into their classroom and curriculum, thus insuring that information learned at the workshop will find its way into the public sector. "We're not sure what we're going to do, but we're thinking of maybe putting in a full elective level course in information security," commented Bull.

One unique addition to the WECS workshop was the inclusion of WECS participants in the WISE conference where they were able to hear from educators more experiences in field of computer security and get a glimpse of ongoing and future developments in the field of information security education.

The 3rd World Conference for Information Security Education (WISE) conference took place on the heels of WECS, June 26 – 28, 2003, and had the goal of international capacity building for educators already in the field of security education. Papers and presenters came from around the globe, spanning public, private, and military academic institutions. WISE3 attendees represented 13 foreign countries from five continents including the Canadian government, the University of Moscow, West Point, and Stockholm University, with industry representation by Cisco Systems, Inc. Two keynote presentations complemented the program: one by Dr. Peter Denning, Chair of the NPS Department of Computer Science, and a second by Dr. Dorothy Denning, also of NPS. Presentations included such topics as information assurance education in developing nations, graduate and undergraduate security programs, computer forensics, hands on laboratories and preparing students to defend against cyber attacks.

The WISE conference was sponsored by the International Federation for Information Processing and the National Science Foundation. Past WISE conferences were held in Perth, Australia and Stockholm, Sweden.

Future conferences will be the information security education workshop in Toulouse, France in 2004 and WISE 4 in Moscow, Russia in May 2005.